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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/668,361	09/24/2003	Yuji Yoshikawa	242919US0	4702
22850	7590	05/03/2006		
OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314			EXAMINER FEELY, MICHAEL J	
			ART UNIT	PAPER NUMBER

1712

DATE MAILED: 05/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/668,361

Applicant(s)

YOSHIKAWA ET AL.

Examiner

Michael J. Feely

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 8-19 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,3-6,8-10 and 15-19 is/are rejected.
- 7) ☒ Claim(s) 2 and 11-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Pending Claims

Claims 1-6 and 8-19 are pending.

Previous Claim Rejections - 35 USC § 102

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
2. The rejection of claims 1-6 and 10 under 35 U.S.C. 102(b) as being anticipated by Ochiai et al. (Pub. No. US 2002/0021393) has been overcome by amendment.

Previous Claim Rejections - 35 USC § 103

3. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

The rejection of claim 9 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Ochiai et al. (Pub. No. US 2002/0021393) has been overcome by amendment.

Claim Rejections - 35 USC § 103

4. Claims 1, 3-6, 8-10, and 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ikeyama (WO 02/075373). The US equivalent (Pub. No. US 2004/0156110) will be used as a translation document in the rejection below.

Regarding claims 1, 3, 4, 9, 10, 15, and 16, Ikeyama discloses: *(I)* an antireflection film (Abstract) comprising:

(1) a high refractive index layer (paragraphs 0077-0135) formed of a first coating composition in the cured state wherein said first coating composition primarily comprises (A)

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see claim for details (paragraphs 0106-0122); (B) *see claim for details* (paragraphs 0083-0094) and/or (C) *see claim for details* (paragraph 0144); and (E) a radical initiator (paragraphs 0094-0100); and

(2) a low refractive index layer (paragraphs 0137-0182) formed of a second coating composition in the cured state wherein said second coating composition primarily comprises (D) *see claim for details* (paragraphs 0146-0157); (B) *see claim for details* (paragraphs 0140-0143) and/or (C) *see claim for details*;

wherein said high refractive index layer and said low refractive index layer are successively stacked (paragraphs 0030-0042);

(3) wherein said component (B) is a compound having at least two acrylic groups in a molecule (paragraphs 0083-0094; 0140-0143);

(4) wherein said component (B) is a compound having at least two acrylic groups and a benzene ring in a molecule (paragraphs 0083-0094; 0140-0143);

(9) wherein said first and second coating compositions have been cured by irradiating them with actinic energy radiation (paragraphs 0094; 0137);

(10) an antireflection film-bearing article having the antireflection film of claim 1 formed on at least one surface of a substrate (paragraphs 0030-0042); (15) wherein said component (B) is a compound having at least two acrylic groups in a molecule (paragraphs 0083-0094; 0140-0143); (16) wherein said component (B) is a compound having at least two acrylic groups and a benzene ring in a molecule (paragraphs 0083-0094; 0140-0143).

Ikeyama disclose that the low refractive index layer can be cured by radiation (paragraph 0137), and their fluoro-polymer bears acrylic, methacrylic, vinyl or styryl groups. In order to

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photo-cure these materials, it appears that (E) a radical initiator would have inherently been present.

Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to include (E) a radical initiator in the low-refractive index layer of Ikeyama because they disclose that their acrylic, methacrylic, vinyl or styryl bearing fluoro-polymer is photo-cured. It appears that a radical initiator would have been inherently required to photo-cure these materials.

Regarding claims 5, 6, 17, and 18, Ikeyama does not explicitly disclose the materials set forth in these claims. However, the scope of the claim is still (B) and/or (C). Hence, the materials in claims 5 and 6 are not required.

Regarding claims 8 and 19, Ikeyama does not explicitly disclose component (G). However, the scope of the claim is still “at least one selected from the group consisting of (E) and (G).” Hence, these materials are not required.

Allowable Subject Matter


5. Claims 2 and 11-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Communication

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael J. Feely whose telephone number is 571-272-1086. The examiner can normally be reached on M-F 8:30 to 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Michael J. Feely
Primary Examiner
Art Unit 1712

May 1, 2006

MICHAEL FEELY
PRIMARY EXAMINER